From: <u>Steve Mason</u>

To: <u>Craig Carroll</u>; <u>R6 DWH Info@EPA</u>; <u>Mark Hansen</u>

**Subject:** Fw: ethoxylated nonylphenol **Date:** 05/21/2010 07:27 AM

Attachments: BP Response Directive 1 Addendum 2 -- 05-20-10.pdf

Any of our Regional people want to way in on this...

Here is the scanned copy of BP response last night...



Faithfully yours Steve

"Frequently, my thoughts get bored and walk down to my mouth. Often, this is a bad thing."

Steve Mason, EPA Region 6 (6SF-PE) 1445 Ross Avenue, Dallas, TX 75202 214-665-2276 / 214-665-2278 fax

---- Forwarded by Steve Mason/R6/USEPA/US on 05/21/2010 07:21 AM -----

From: Craig Matthiessen/DC/USEPA/US
To: Steve Mason/R6/USEPA/US@EPA

Date: 05/21/2010 06:58 AM

Subject: Re: ethoxylated nonylphenol

Hey, there mister regional response person. Good to hear from you.

Not that much of a scientist - I just play one on TV.

Yes, I believe these are the same or at least part of the same family. There can be different CAS numbers I think depending on the degree of polymerization. There are endocrine concerns but I believe I saw data that says the NPs and/or NPEs degrade within days, shorter in sunlight. Another trade-off issue.... Craig

▼ Steve Mason---05/21/2010 07:31:46 AM---Hey there... long time no talk.... Quick question, Mr. Scientist...

From: Steve Mason/R6/USEPA/US

To: Craig Matthiessen/DC/USEPA/US@EPA

Date: 05/21/2010 07:31 AM Subject: Re: ethoxylated nonylphenol Hey there... long time no talk....

Quick question, Mr. Scientist...

Is Ethoxylated nonylphenol, which you described in your email, the same as nonyphenol ethoxylates, or nonylphenols....???

If so, in Wikipedia, at the bottom they describe those as:

- Nonylphenol and nonyphenol ethoxylates have been banned in the European Union as a hazard to human and environmental safety.
- For freshwater ecosystems, the Environmental Protection Agency has set two types of standards: the first which is considered acute criteria is one-hour average concentration of nonylphenol does not exceed 28 µg/L more than once every three years on the average.
- For saltwater ecosystems, the standard is considered to be chronic criteria and is set to four-day average concentration of nonylphenol that does not exceed 6.6 µg/l more than once every three years on the average.

#### **Thanks**

Faithfully yours Steve

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# ▼ Craig Matthiessen---05/20/2010 08:52:37 PM---Hi; did a little digging on this substance. Didn't find anything relative to its bioaccumulation a

From: Craig Matthiessen/DC/USEPA/US
To: Sam Coleman/R6/USEPA/US@EPA

Cc: Albert Venosa/CI/USEPA/US@EPA, "Craig Carroll" <carroll.craig@epa.gov>, Dana

Tulis/DC/USEPA/US@EPA, "Mark Hansen" <hansen.mark@epa.gov>, Jon

Rauscher/R6/USEPA/US@EPA, "Dana Tulis" <tulis.dana@epa.gov>, Steve Mason/R6/USEPA/US@EPA

Date: 05/20/2010 08:52 PM Subject: Re: ethoxylated nonylphenol

Hi; did a little digging on this substance. Didn't find anything relative to its bioaccumulation assertion; only that certain nonoxynols (of which this is one) have mild to medium estrogenic concerns - in fact one

version is used as a spermatocide.

Ethoxylated nonylphenol (CAS #9016-45-9) - a non-ionic surfactant (here's a wiki page on surfactants: http://en.wikipedia.org/wiki/Surfactant)

Note at the bottom of this page, surfactants "are known to taste good to animals, ecosystems and humans, and can increase the diffusion of other environmental contaminants. Despite this, they are routinely deposited in numerous ways on land and into water systems, whether as part of an intended process or as industrial and household waste." According to Dow: "These surfactants are used anywhere there is a need for increased surface activity, and provide excellent all-purpose detergency and wetting, as well as solubilization and emulsification."

According to our CAMEO database: General Description: Colorless liquid or white solid with a mild odor. May float or sink in water. A low molecular-weight polymer. Used as a non-ionic surfactant, as an emulsifier, or as a metal cleaner, depending on the degree of polymerization.

Here is a link to an information sheet in the Coast Guard chemical hazard (CHRIS) manual:

http://cameochemicals.noaa.gov/chris/ENP.pdf

Scroll down to the water pollution box which notes that aquatic toxicity ranges from low to high depending on the degree of polymerization. Also note that there's no food chain concentration potential - perhaps this is an indicator of a lack of bioaccumulation. One manufacturer of an ethoxylated nonylphenol (with a different CAS number) for a powdered vehicle wash says its biodegradable.

The only concern I ran across is on this wiki for nonoxynols: http://en.wikipedia.org/wiki/Nonoxynol
They have a mild to medium estrogenic function; some companies

They have a mild to medium estrogenic function; some companies have removed these from their laundry detergents. The question would be in what form the ethoxylated nonylphenol takes when it breaks down the oil and whether the resulting substance has an estrogenic or bioaccumulation concern.

Craig Matthiessen

## ▼ <u>Sam Coleman---05/20/2010 08:06:59 PM---Tonight?</u>

From: Sam Coleman/R6/USEPA/US

To: Dana Tulis/DC/USEPA/US@EPA, Albert Venosa/CI/USEPA/US@EPA, "Dana Tulis"

<tulis.dana@epa.gov>, Craig Matthiessen/DC/USEPA/US@EPA

Cc: Jon Rauscher/R6/USEPA/US@EPA, "Mark Hansen" <hansen.mark@epa.gov>, "Craig Carroll"

<carroll.craig@epa.gov>

Date: 05/20/2010 08:06 PM
Subject: Re: ethoxylated nonylphenol

## Tonight?

Samuel Coleman, PE Superfund Div Region 6 214.665.6701 Ofc 214.789.2016 Cell

Sent by EPA Wireless E-Mail Services

## ▼ Dana Tulis

---- Original Message ---From: Dana Tulis
Sent: 05/20/2010 08:06 PM EDT
To: Sam Coleman; Albert Venosa; "Dana Tulis"
<tulis.dana@epa.gov>; Craig Matthiessen
Cc: Jon Rauscher; "Mark Hansen" <hansen.mark@epa.gov>;
"Craig Carroll" <carroll.craig@epa.gov>
Subject: Re: ethoxylated nonylphenol
I would like Craig M to lead this effort,

#### ▼ Sam Coleman

---- Original Message ---From: Sam Coleman
Sent: 05/20/2010 07:27 PM EDT
To: Albert Venosa; "Dana Tulis" <tulis.dana@epa.gov>
Cc: Jon Rauscher; "Mark Hansen" <hansen.mark@epa.gov>;
"Craig Carroll" <carroll.craig@epa.gov>
Subject: Fw: ethoxylated nonylphenol
Need to know all you know about this compound.

Samuel Coleman, PE Superfund Div Region 6 214.665.6701 Ofc 214.789.2016 Cell

Sent by EPA Wireless E-Mail Services

### ▼ Steve Mason

---- Original Message ----From: Steve Mason
Sent: 05/20/2010 06:23 PM CDT
To: Sam Coleman

Subject: ethoxylated nonylphenol

Faithfully yours Steve

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Steve Mason, EPA Region 6 (6SF-PE) 1445 Ross Avenue, Dallas, TX 75202